REMARKS / DISCUSSION OF ISSUES

Claims 1-9 are presently under consideration, with claims 10-13 being withdrawn as a result of a requirement for restriction.

Unless indicated to the contrary, claims are amended for non-statutory reasons, such as to delete European-style phraseology and any typographical errors. No new matter is added.

Objections to the Claims

The objections to claims 2-7 and 9 for the use of the articles 'a' or 'an' instead of the article 'the' is respectfully traversed. First, no basis in law is provided in support of the position. Second, the use of 'a' or'an' as the initial article in a dependent claim is common in claim drafting, and one of style. As such, without basis for the objections to these claims, Applicants respectfully decline to amend the claims are suggested.

Objections to the Drawings

The amendment to Fig. 1a as provided in the enclosed Replacement Sheet nullifies the objection to the drawings. Specifically, Fig. 1a is labeled now as 'Prior Art.'

Amendments to the Specification

The amendments to the specification are provided to remedy an error in the description of Figs. 1a. Specifically, in the filed application, Fig. 1 was listed and described both Figs. 1a and 1b in substance, whereas and properly, Figs. 1a and 1b were shown. The amendments to the specification remedy this error. No new matter is added.

Rejections under 35 U.S.C. § 112, Second Paragraph

The rejection under this section of the Code is moot in view of the present amendment to claim 4.

Rejections under 35 U.S.C. § 102

Claims 1, 6 and 8 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Tsukagoshi, et al.* (U.S. Patent 6,833,980). For at least the reasons set forth herein, Applicants respectfully submit that the rejected claims are patentable over the applied art.

Applicants rely at least on the following standards with regard to proper rejections under 35 U.S.C. § 102. Notably, a proper rejection of a claim under 35 U.S.C. § 102 requires that a single prior art reference disclose each element of the claim. *See, e.g., W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983). Anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference. *See, e.g., In re Paulsen,* 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994); *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). Alternatively, anticipation requires that each and every element of the claimed invention be embodied in a single prior art device or practice. *See, e.g., Minnesota Min. & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.,* 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992). For anticipation, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *See, e.g., Scripps Clinic & Res. Found. v. Genentech, Inc.,* 927 F.2d 1565, 18 USPQ2d 1001 (Fed. Cir. 1991).

i. Rejection under 102(e) is improper

The rejection under this subsection of the Code is improper based on the filing date of the present application and the filing/issue dates of the applied art. For at least this reason, the rejection is of improper basis and should be withdrawn.

ii. Claim 1 is patentable over the applied art

Claim 1 is drawn to a nanostructure and features:

"...a nanotube with a crystalline mantle and a hollow core, wherein the crystalline mantle has a crystalline structure of a diamond structure, a zinc blend structure, or a wurtzite structure."

As described in the filed application, the magnitude of the blueshift realized with the nanostructures is greater than with other materials. As stated in the filed application to provide this increased blueshift the:

> "...nanostructure comprises a nanotube with a crystalline mantle and a hollow core Unexpectedly, it has been found that tubes with a cylindrically shaped crystalline mantle and that they are stable. In the experiments done, the crystal structure was found to be equal to the bulk crystal structure and particularly of the diamond, zinc blend or wurtzite structure. The nanotubes thus formed were mechanically and chemically stable; the tubes did not oxidize upon exposure to ambient air for a week.

By contrast, the applied art to *Tsukagoshi, et al.* fails to disclose any of the crystalline structures specifically recited in claim 1. Therefore, the applied art to *Tsukagoshi, et al.* fails to disclose at least one feature of independent claim 1 and a *prima facie* case of anticipation cannot be made based on this reference. As such, claim 1 is patentable over the applied art. Moreover, claims 2-9, which depend from claim 1 directly or indirectly, are patentable for at least the same reasons.

Rejections under 35 U.S.C. § 103

The rejections under this section of the Code have been considered. Applicants in no way concede the propriety of these rejections and reserve their right to address these rejections in further correspondence if necessary. However, because the claims rejected under this section of the Code depend from claim 1, these claims are patentable over the applied art.

Conclusion

In view the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number

50-0238 for any additional fees, including, but not limited to, the fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:
Phillips Electronics North America Corp.

/William S. Francos/

by: William S. Francos (Reg. No. 38,456)
Date: November 13, 2007

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Attachment: One (1) Replacement Sheet of Drawings